

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/IB2004/003501

International filing date (day/month/year)  
20.10.2004

Priority date (day/month/year)  
06.11.2003

International Patent Classification (IPC) or both national classification and IPC  
INV. H01J61/02 H01J61/35 H01J61/40 C03C17/00

Applicant  
KONINKLIJKE PHILIPS ELECTRONICS N.V.

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



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Date of completion of  
this opinion

see form  
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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material:

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material:

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing:

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	<u>1-7</u>
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-7</u>
Industrial applicability (IA)	Yes: Claims	<u>1-7</u>
	No: Claims	

**2. Citations and explanations**

see separate sheet

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

**1 Prior art**

Reference is made to the following document/s/:

- D1: GB-A-1 166 989 (PHILIPS ELECTRONIC ASSOCIATED [GB]) 15 October 1969  
(1969-10-15)  
D2: WO 01/20641 A (KONINKL PHILIPS ELECTRONICS NV [NL]) 22 March 2001  
(2001-03-22) cited in the application

**Inventive step**

**2 Independent claim 1 not inventive**

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document) a tubular lamp (page 1, line 59 and Fig. 1) comprising:

- a lamp vessel which accommodates a light source (Fig. 1 (1)),
- a first part of the lamp vessel provided with a coating reflective of radiation emitted by the light source (page 2, line 17; Fig. 2 (4)),
- a second part of the lamp vessel being further provided with a light-absorbing coating (page 2, lines 46-47; Fig. 2 (5)).

The subject-matter of claim 1 therefore differs from this known D1 in that the light-

absorbing coating comprises pigments incorporated in a sol gel matrix.

The technical effect of this difference is that a higher adhesion of the coating to the lamp vessel is obtained and the coating resists at higher temperatures.

The problem to be solved by the present invention may therefore be regarded as how to modify the lamp of D1 in order to provide a higher adhesion of the coating to the lamp vessel and higher resistance of the coating at higher temperatures.

2.2 Document D2 discloses a lamp provided with a light-absorbing coating comprising pigments incorporated in a sol gel matrix (claim 1). Furthermore, it is known from D2 that this kind of coatings present a good thermal stability (page 2, lines 21-22 and 32-33). Coatings on a sol gel basis are nowadays very used because of their temperature resistivity and other advantageous features.

2.3 When confronted with the mentioned problem, the skilled person would realize that the use of the light-absorbing coating disclosed in D2 provides a coating, with improved adhesion properties and thermal stability. Therefore, the skilled person would apply the teachings of D2 to the embodiment in D1, and derive a lamp having all features of claim 1, without exercising an inventive step. The subject-matter of claim 1 is consequently not inventive.

### **3 Independent claim 6 not inventive**

The same reasoning applies, *mutatis mutandis*, to the subject-matter of the corresponding independent claim 6, which therefore is also considered not inventive.

### **4 Dependent claims**

Dependent claims 2-5 and 7 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, for the following reasons:

The feature present in claims 2 and 3 are related to the coating areas and are known

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AUTHORITY (SEPARATE SHEET)**

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from D1 (claim 3 and page 2, lines 34-36). Their subject-matter is therefore not inventive.

The features present in claims 4, 5 and 7 are related to a lamp cap, orientation means and a luminaire comprising the tubular lamp respectively. These are all features which the skilled person naturally would apply according to his needs and without the exercise of inventive skill. The subject-matter of these claims is therefore not inventive either.